

AMENDMENT TO THE CLAIMS

In the Claims

The following Listing of Claims, in which deleted text appears ~~struck through~~ and inserted text appears underlined, will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1-169. (Canceled)

170. (New) An oligonucleotide compound consisting of 12-50 monomers, wherein adjacent monomers are covalently linked by a phosphodiester or a phosphorothioate linkage; and
wherein said compound comprises a region of at least 8 contiguous monomers, wherein at least one monomer of said region is a nucleoside analogue, and wherein the sequence of said region is identically present in the sequence
ctcaatccatggcagc (SEQ ID NO: 130).

171. (New) The oligonucleotide compound of claim 170, wherein each said nucleoside analogue is independently selected from the group consisting of: an LNA monomer, a nucleoside analogue containing a 2'-O-methyl sugar, a nucleoside analogue containing a 2'-fluoro sugar, a nucleoside analogue containing a 2'-MOE sugar, a nucleoside analogue containing a 2'-O-(3-amino)propyl sugar and a nucleoside analogue containing a 2'-O-(3-hydroxy)propyl sugar.

172. (New) The oligonucleotide compound of claim 171, wherein said nucleoside analogue is an LNA monomer.

173. (New) The oligonucleotide compound of claim 172, wherein said LNA monomer is selected from the group consisting of a thio-LNA monomer, an amino-LNA monomer and an oxy-LNA monomer.

174. (New) The oligonucleotide compound of claim 173, wherein said LNA monomer is a beta-D-oxy-LNA monomer.

175. (New) The oligonucleotide compound according to claim 170, wherein the number of nucleoside analogues in said compound is 2-50.

176. (New) The oligonucleotide compound according to claim 175, wherein the number of nucleoside analogues in said compound is 2-45.

177. (New) The oligonucleotide compound according to claim 176, wherein the number of nucleoside analogues in said compound is 3-40.

178. (New) The oligonucleotide compound according to claim 177, wherein the number of nucleoside analogues in said compound is 4-35.

179. (New) The oligonucleotide compound according to claim 178, wherein the number of nucleoside analogues in said compound is 5-30.

180. (New) The oligonucleotide compound according to claim 179, wherein the number of nucleoside analogues in said compound is 6-25.

181. (New) The oligonucleotide compound according to claim 180, wherein the number of nucleoside analogues in said compound is 6-20.

182. (New) The oligonucleotide compound according to claim 181, wherein the number of nucleoside analogues in said compound is 6-12.

183. (New) The oligonucleotide compound according to claim 182, wherein the number of nucleoside analogues in said compound is 8-12.

184. (New) The oligonucleotide compound according to claim 182, wherein the number of nucleoside analogues in said compound is 6-10.

185. (New) The oligonucleotide compound according to claim 184, wherein the number of nucleoside analogues in said compound is 7-9.

186. (New) The oligonucleotide compound according to claim 184, wherein the number of nucleoside analogues in said compound is 8.

187. (New) The oligonucleotide compound according to any of claims 175-186, wherein all monomers in said compound are nucleoside analogues.

188. (New) The oligonucleotide compound according to any of claims 175-186, wherein a DNA monomer is present at the 3' end of said compound.

189. (New) The oligonucleotide compound according claim 170, wherein said region consists of at least 10 contiguous monomers, and the sequence of said region is identically present in the sequence ctcaatccatggcagc (SEQ ID NO: 130).

190. (New) The oligonucleotide compound of claim 170, wherein said region consists of at least 12 contiguous monomers, and the sequence of said region is identically present in the sequence ctcaatccatggcagc (SEQ ID NO: 130).

191. (New) The oligonucleotide compound according to claim 170, wherein said region consists of at least 14 contiguous monomers, and the sequence of said region is identically present in the sequence ctcaatccatggcagc (SEQ ID NO: 130).

192. (New) The oligonucleotide compound according to claim 170, wherein said region consists of 10, 11, 12, 13 14, 15 or 16 contiguous monomers, and the sequence of said region is identically present in the sequence ctcaatccatggcagc (SEQ ID NO: 130).

193. (New) The oligonucleotide compound according to claim 170, wherein said compound consists of 12-40 linked monomers.

194. (New) The oligonucleotide compound of claim 170, wherein said compound consists of 12-20 linked monomers.

195. (New) The oligonucleotide compound according to claim 194, wherein said compound consists of 14, 15, 16, 17 or 18 linked monomers.

196. (New) The oligonucleotide compound according to claim 195, wherein said compound consists of 15-17 linked monomers.

197. (New) The oligonucleotide compound according to claim 196, wherein said compound consists of 15 linked monomers.

198. (New) The oligonucleotide compound according to claim 196, wherein said compound consists of 16 linked monomers.

199. (New) The oligonucleotide compound according to claim 196, wherein said compound consists of 17 linked monomers.

200. (New) The oligonucleotide compound according to claim 170, wherein all said linkages between adjacent monomers are phosphodiester linkages.

201. (New) The oligonucleotide compound according to claim 170, wherein all said linkages between adjacent monomers are phosphorothioate linkages.

202. (New) The oligonucleotide compound according to claim 170, wherein, from the 5'-end to the 3'-end, said region comprises 2-6 contiguous LNA monomers covalently linked to 4-12 contiguous DNA monomers which are covalently linked to 2-6 contiguous LNA monomers.

203. (New) The oligonucleotide compound according to claim 202, wherein from the 5'-end to the 3'-end said region comprises 4 contiguous LNA monomers covalently linked to 8 contiguous DNA monomers which are covalently linked to 4 contiguous LNA monomers.

204. (New) The oligonucleotide compound according to claim 170, wherein, from the 5'-end to the 3'-end, said region comprises 2-6 contiguous LNA monomers covalently linked to 4-12 contiguous DNA monomers, which are covalently linked 2-5 contiguous LNAs monomers, which are covalently linked to a single DNA monomer.

205. (New) The oligonucleotide compound according to claim 204, wherein, from the 5'-end to the 3'-end, said region comprises 4 contiguous LNA monomers which are covalently linked to 8 contiguous DNA monomers, which are covalently linked to 3 contiguous LNA monomers, which are covalently linked to a single DNA monomer.

206. (New) The oligonucleotide compound of claim 170, wherein said region is CTCAatccatggCAGC (SEQ ID NO: 130) or CTCAatccatggCAGc (SEQ ID NO: 130), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers.

207. (New) The oligonucleotide compound of claim 206, wherein said region is C_sT_SC_SA_sa_st_sc_sc_sa_st_sg_sg_sC_SA_sG_SC (SEQ ID NO: 664), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, and wherein the subscript “s” denotes a phosphorothioate linkage.

208. (New) The oligonucleotide compound of claim 207, wherein said compound is C_sT_SC_SA_sa_st_sc_sc_sa_st_sg_sg_sC_SA_sG_SC (SEQ ID NO: 664), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers , and wherein the subscript “s” denotes a phosphorothioate linkage.

209. (New) The oligonucleotide compound of claim 206, wherein said region is $C_oT_oC_oA_oastscscsaststgsgsC_oA_oG_oC$ (SEQ ID NO: 662), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, and wherein the subscript “s” denotes a phosphorothioate linkage and the subscript “o” denotes a phosphodiester linkage.

210. (New) The oligonucleotide compound of claim 209, wherein said compound is $C_oT_oC_oA_oastscscsaststgsgsC_oA_oG_oC$ (SEQ ID NO: 662), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, and wherein the subscript “s” denotes a phosphorothioate linkage and the subscript “o” denotes a phosphodiester linkage.

211. (New) The oligonucleotide compound of claim 206, wherein said region is $C_sT_sC_sA_sastscscsastsgsgsC_sA_sG_sC$ (SEQ ID NO: 661), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, and wherein the subscript “s” denotes a phosphorothioate linkage.

212. (New) The oligonucleotide compound of claim 211, wherein said compound is $C_sT_sC_sA_sastscscsastsgsgsC_sA_sG_sC$ (SEQ ID NO: 661), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, and wherein the subscript “s” denotes a phosphorothioate linkage.

213. (New) The oligonucleotide compound of claim 170, wherein said region is $CTCAatccatggCAGC$ (SEQ ID NO: 130) or $CTCAatccatggCAGc$ (SEQ ID NO: 130), wherein uppercase letters denote beta-D-oxy-LNA monomers, lowercase letters denote DNA monomers, and wherein the cytosine in each cytosine-containing beta-D-oxy-LNA monomer is 5-methyl cytosine.

214. (New) The oligonucleotide compound of claim 213, wherein said region is C_sT_sC_sA_sa_st_sc_sc_sa_st_sg_sg_sC_sA_sG_sC (SEQ ID NO: 664), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, the subscript “s” denotes a phosphorothioate linkage, and wherein the cytosine in each cytosine-containing beta-D-oxy-LNA monomer is 5-methyl cytosine.

215. (New) The oligonucleotide compound of claim 214, wherein said compound is C_sT_sC_sA_sa_st_sc_sc_sa_st_sg_sg_sC_sA_sG_sC (SEQ ID NO: 664), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers , the subscript “s” denotes a phosphorothioate linkage, and wherein the cytosine in each cytosine-containing beta-D-oxy-LNA monomer is 5-methyl cytosine.

216. (New) The oligonucleotide compound of claim 213, wherein said region is C_OT_OC_OA_Oa_st_sc_sc_sa_st_sg_sg_sC_OA_OG_OC (SEQ ID NO: 662), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, the subscript “s” denotes a phosphorothioate linkage, the subscript “o” denotes a phosphodiester linkage, and wherein any cytosine in each cytosine-containing beta-D-oxy-LNA monomer is 5-methyl cytosine.

217. (New) The oligonucleotide compound of claim 216, wherein said compound is C_OT_OC_OA_Oa_st_sc_sc_sa_st_sg_sg_sC_OA_OG_OC (SEQ ID NO: 662), wherein uppercase letters denote beta-D-oxy-LNA monomers, lowercase letters denote DNA monomers, the subscript “s” denotes a phosphorothioate linkage, the subscript “o” denotes a phosphodiester linkage, and wherein any cytosine in each cytosine-containing beta-D-oxy-LNA monomer is 5-methyl cytosine.

218. (New) The oligonucleotide compound of claim 213, wherein said region is $C_sT_sC_sA_sas_tsc_sas_tsgsgsC_sA_sG_sC$ (SEQ ID NO: 661), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, the subscript “s” denotes a phosphorothioate linkage, and wherein the cytosine in each cytosine-containing beta-D-oxy-LNA monomer is 5-methyl cytosine.

219. (New) The oligonucleotide compound of claim 218, wherein said compound is $C_sT_sC_sA_sas_tsc_sas_tsgsgsC_sA_sG_sc$ (SEQ ID NO: 661), wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, the subscript “s” denotes a phosphorothioate linkage, and wherein the cytosine in each cytosine-containing beta-D-oxy-LNA monomer is 5-methyl cytosine.

220. (New) The oligonucleotide compound of claim 219, wherein said compound is $^{Me}C_sT_s^{Me}C_sA_sas_tsc_sas_tsgsgs^{Me}C_sA_sG_sc$, wherein uppercase letters denote beta-D-oxy-LNA monomers and lowercase letters denote DNA monomers, the subscript “s” denotes a phosphorothioate linkage, and ^{Me}C denotes a beta-D-oxy-LNA monomer containing 5-methyl cytosine.

221. (New) A conjugate comprising the oligonucleotide compound according to claim 170 covalently attached to at least one non-nucleotide or non-polynucleotide moiety.

222. (New) A pharmaceutical composition comprising an oligonucleotide compound as defined in claim 170 or a conjugate as defined in claim 221, and a pharmaceutically acceptable diluent, carrier or adjuvant.

223. (New) The pharmaceutical composition according to claim 222 further comprising at least one chemotherapeutic agent.

224. (New) The pharmaceutical composition according to claim 223 wherein each said chemotherapeutic agent is independently selected from the group consisting of prednisone, dexamethasone; decadron; altretamine (hexalen, hexamethylmelamine (HMM)); amifostine (ethyol); aminoglutethimide (cytadren); amsacrine (M-AMSA); anastrozole (arimidex); androgens, such as testosterone; asparaginase (elspar); bacillus calmette-gurin; bicalutamide (casodex); bleomycin (blenoxane); busulfan (myleran); carboplatin (paraplatin); carmustine (BCNU, BiCNU); chlorambucil (leukeran); chlorodeoxyadenosine (2-CDA, cladribine, leustatin); cisplatin (platinol); cytosine arabinoside (cytarabine); dacarbazine (DTIC); dactinomycin (actinomycin-D, cosmegen); daunorubicin (cerubidine); docetaxel (taxotere); doxorubicin (adriomycin); epirubicin; estramustine (emcyt); estrogens, such as diethylstilbestrol (DES); etoposide (VP-16, VePesid, etopophos); fludarabine (fludara); flutamide (eulexin); 5-FUDR (floxuridine); 5-fluorouracil (5-FU); gemcitabine (gemzar); goserelin (zodalex); herceptin (trastuzumab); hydroxyurea (hydrea); idarubicin (idamycin); ifosfamide; IL-2 (proleukin, aldesleukin); interferon alpha (intron A, roferon A); irinotecan (camptosar); leuprolide (lupron); levamisole (ergamisole); lomustine (CCNU); mechlorethamine (mustargen, nitrogen mustard); melphalan (alkeran); mercaptopurine (purinethol, 6-MP); methotrexate (mexate); mitomycin-C (mutamycin); mitoxantrone (novantrone); octreotide (sandostatin); pentostatin (2-deoxycoformycin, nipent); plicamycin (mithramycin, mithracin); prorocarbazine (matulane); streptozocin; tamoxifin (nolvadex); taxol (paclitaxel); teniposide (vumon, VM-26); thiotapec; topotecan (hycamtin); tretinoic acid (vesanoid, all-trans retinoic acid); vinblastine (valban); vincristine (oncovin) and vinorelbine (navelbine).